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Chronic CAD/Stable Ischemic Heart Disease

LONG-TERM CLINICAL OUTCOME AFTER CORONARY STENTING IN HEMODIALYSIS PATIENTS

ACC Moderated Poster Contributions
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Session Title: When CAD Gets Really Bad: Renal Disease, Polyvascular Disease, and Diabetes
Abstract Category: 2. Chronic CAD/Stable Ischemic Heart Disease: Clinical
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Background: Percutaneous coronary intervention (PCI) with stent implantation has been widely performed in patients with coronary artery disease. However, in patients on haemodialysis (HD), adverse cardiac events after PCI are frequently seen, and high restenosis rate remains major clinical problem. Furthermore, there are limited reports regarding long-term clinical outcome after stent implantation in this population.

Methods: A total of 505 patients on HD who underwent their first PCI to native coronary arteries with stent for stable angina were enrolled. We evaluated long-term clinical outcome in HD patients undergoing PCI with stent implantation.

Results: Mean follow-up duration was 49 months (SD 32). Major adverse cardiac events including cardiovascular death, nonfatal myocardial infarction, and target lesion revascularization (TLR) occurred in 197 (39.0%) patients. The ten-year rates of the incidence of TLR were 46.9% by Kaplan-Meier survival rate. When we divided patients into those treated with drug-eluting stent (DES) (n = 301) and those with bare metal stent (BMS) (n = 204) with reference to the kind of stent, there were no significant differences in TLR rates between DES and BMS groups in a year after PCI (17.8% vs. 21.3%, P = 0.32). However, those treated with DES had significantly lower rates for TLR compared to those treated with BMS beyond 1 year follow-up after PCI (16.4% vs. 30.9%, P = 0.019).

Conclusions: In patients on HD, the rates of major cardiac events were high after PCI. In such population, implantation of DES might be more effective to prevent TLR for medium to long follow-up period than that of BMS, although restenosis in patients treated with DES was common in short period within 1 year after PCI.